CLAIMS

1. An LED chip mounting structure, comprising:

a wiring board provided with a mounting pad;

an LED chip provided with an electrode facing the mounting pad;

a bump disposed between the mounting pad and the electrode for electrically connecting the mounting pad and the electrode to each other; and

an adhesive member for fixing the LED chip to the wiring board.

2. The LED chip mounting structure according to claim 1, wherein the adhesive member comprises an anisotropic conductive resin composite.

3. The LED chip mounting structure according to claim 2, wherein the bump is fusion-welded to the mounting pad, and is electrically connected to the electrode by the anisotropic conductive resin composite.

4. The LED chip mounting structure according to claim 1, wherein the adhesive member comprises an insulating resin composite.

5. The LED chip mounting structure according to claim 4, wherein the bump is fusion-welded to the mounting pad, and

directly abuts on the electrode without having the insulating resin composite therebetween.

6. The LED chip mounting structure according to claim 1, wherein the LED chip is further provided with an electrode that is opposite to the wiring board.

7. An LED chip mounting structure, comprising:

a wiring board provided with a first and a second mounting pads;

an LED chip provided with a first electrode facing the first mounting pad and with a second electrode facing the second mounting pad;

a first bump disposed between the first mounting pad and the first electrode for electrically connecting the first mounting pad and the first electrode to each other;

a second bump disposed between the second mounting pad and the second electrode for electrically connecting the second mounting pad and the second electrode to each other; and

an adhesive member for fixing the LED chip to the wiring board.

8. The LED chip mounting structure according to claim 7, wherein the adhesive member comprises an anisotropic conductive resin composite.

9. The LED chip mounting structure according to claim 8, wherein the first bump is fusion-welded to the first mounting pad and is electrically connected to the first electrode by the anisotropic conductive resin composite, and wherein the second bump is fusion-welded to the second mounting pad and is electrically connected to the second electrode by the anisotropic conductive resin composite.

10. The LED chip mounting structure according to claim 7, wherein the adhesive member comprises an insulating resin composite.

11. The LED chip mounting structure according to claim 10, wherein the first bump is fusion-welded to the first mounting pad and directly abuts on the first electrode without having the insulating resin composite therebetween, and wherein the second bump is fusion-welded to the second mounting pad and directly abuts on the second electrode without having the insulating resin composite therebetween.

12. An LED chip mounting structure, comprising:

a wiring board provided with at least three mounting pads;

an LED chip provided with an electrode facing first and second mounting pads selected from among said at least three mounting pads;

a first bump disposed between the first mounting pad and the electrode for electrically connecting the first mounting pad and the electrode to each other;

a second bump disposed between the second mounting pad and the electrode for electrically connecting the second mounting pad and the electrode to each other; and

an adhesive member for fixing the LED chip to the wiring board.

13. The LED chip mounting structure according to claim 12, wherein the adhesive member comprises an anisotropic conductive resin composite.

14. The LED chip mounting structure according to claim 13, wherein the first bump is fusion-welded to the first mounting pad and is electrically connected to the electrode by the anisotropic conductive resin composite, and wherein the second bump is fusion-welded to the second mounting pad and is electrically connected to the electrode by the anisotropic conductive resin composite.

15. The LED chip mounting structure according to claim 12, wherein the adhesive member comprises an insulating resin composite.

16. The LED chip mounting structure according to claim 15, wherein the first bump is fusion-welded to the first mounting pad and directly abuts on the electrode without

having the insulating resin composite therebetween, and wherein the second bump is fusion-welded to the second mounting pad and directly abuts on the electrode without having the insulating resin composite therebetween.

17. An LED chip mounting structure, comprising:

a wiring board provided with at least three mounting pads;

an LED chip provided with a first electrode facing a first mounting pad selected from among said at least three mounting pads and with a second electrode facing a second mounting pad selected from among said at least three mounting pads;

a first bump disposed between the first mounting pad and the first electrode for electrically connecting the first mounting pad and the first electrode to each other;

a second bump disposed between the second mounting pad and the second electrode for electrically connecting the second mounting pad and the second electrode to each other; and

an adhesive member for fixing the LED chip to the wiring board.

18. The LED chip mounting structure according to claim 17, wherein the adhesive member comprises an anisotropic conductive resin composite.

19. The LED chip mounting structure according to claim 18, wherein the first bump is fusion-welded to the first mounting pad and is electrically connected to the first electrode by the anisotropic conductive resin composite, and wherein the second bump is fusion-welded to the second mounting pad and is electrically connected to the second electrode by the anisotropic conductive resin composite.

20. The LED chip mounting structure according to claim 17, wherein the adhesive member comprises an insulating resin composite.

21. The LED chip mounting structure according to claim 20, wherein the first bump is fusion-welded to the first mounting pad and directly abuts on the first electrode without having the insulating resin composite therebetween, and wherein the second bump is fusion-welded to the second mounting pad and directly abuts on the second electrode without having the insulating resin composite therebetween.

22. An image reading device, comprising: an LED chip for emitting light to irradiate an image-scanned region of a document; a wiring board on which the chip is mounted; and a light receiving portion for receiving light emitted from the LED chip and reflected on the image-scanned region and for outputting an image signal corresponding to an amount of light received;

the wiring board being provided with a mounting pad,

the LED chip being provided with an electrode facing the mounting pad,

a bump being disposed between the mounting pad and the electrode for electrically connecting the mounting pad and the electrode to each other,

the wiring board and the LED chip being fixed to each other by an adhesive member.